

What IS CLAIMED IS:

1. A chemical compound for use in rapid and complete detoxification of toxic formaldehyde vapors from incidental releases of unused or spent formaldehyde solutions of various concentrations.

The invention as defined in Claim 1 wherein:

Compound of Tris Amino and reduced Glutathione.

2. A chemical compound for protecting workers exposed to formaldehyde during the course of their work, by offering a potential enzymatic defense against against formaldehyde in oral buccal tissue specimens and oral epithelial cell lines.

The invention as defined in Claim 2 wherein:

Component of reduced Glutathione.

3. A chemical compound for stabilization of formaldehyde and methanol.

At higher temperatures, the acidity of formaldehyde solutions increases as a result of the Canizzaro reaction, a reduction-oxidation reaction of formaldehydes to yield formic acid and methanol. The methanol produced in this reaction, as well as that already present, reacts with formaldehyde to form methylal, therefore decreasing the quantity of available formaldehyde.

The invention as defined in Claim 3 wherein:

Component of Beta-cyclodextrin.

4. A chemical compound for use in rapid detoxification of formaldehydes in spent and/or unused formaldehyde solutions.

The invention as defined in Claim 4 wherein:

Compound of Tris Amino, urea, and reduced glutathione.